

REMARKS

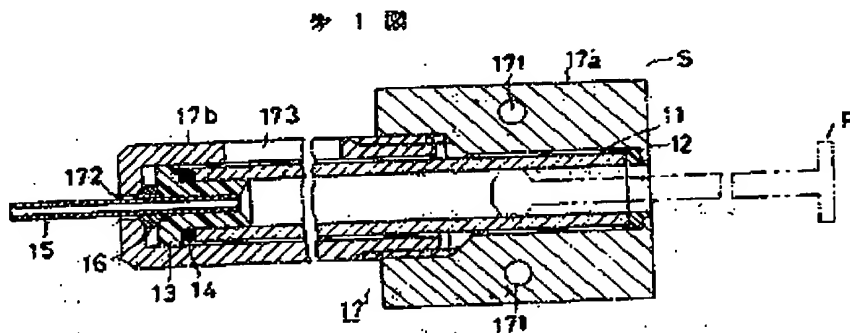
The application has been amended to place the application in condition for allowance at the time of the next Official Action.

Claims 45-47 and 49-89 were previously pending in application. New claim 90 is added. Therefore, claims 45-47 and 49-90 are presented for consideration. Claims 56 and 58-86 are withdrawn from consideration as being directed to a non-elected species.

Claims 45-47, 49-52, 87 and 88 were rejected as anticipated by YAMASHITA JP 55-073352. That rejection is respectfully traversed.

Independent claim 45 is amended and recites that a base of the needle comes into direct contact with an end face of a hollow element.

As seen in Figure 1 of YAMASHITA, reproduced below, and as disclosed in the constitution of YAMASHITA, O-ring 14 is between the end face of reservoir 11 and base 13 to account for changes in the cylinder due to expansion and contraction.



As O-ring 14 is between cap 13 and main body 11, YAMASHITA does not disclose that an end face of main body 11 is in direct contact with cap 13. Rather, as set forth above, the O-ring prevents direct contact and is required by YAMASHITA to absorb the movement of main body 11 caused by thermal expansion and contraction.

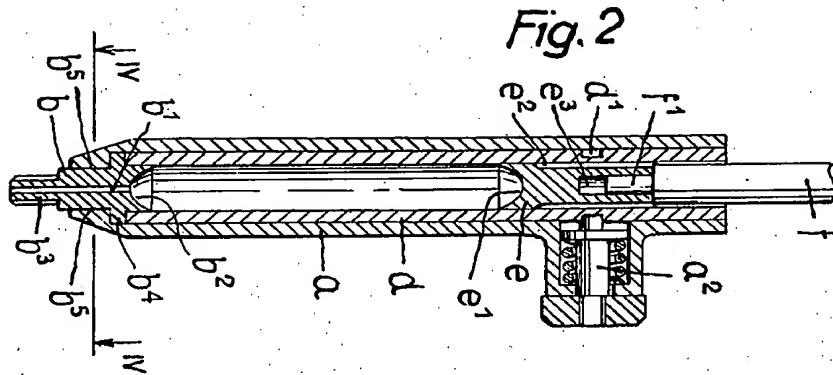
As YAMASHITA does not disclose that which is recited, the anticipation rejection is not viable. Reconsideration and withdrawal of the rejection are respectfully requested.

The dependent claims are believed patentable at least for depending from an allowable independent claim.

Claims 45, 47, 49, 51, 52, and 87-89 were rejected as anticipated by ROOS 2,537,550. That rejection is respectfully traversed.

Claim 45 is amended and recites a longitudinally continuous hollow element forming a reservoir. Claim 45 also recites a piston having a convex tip.

As seen in Figure 2 of ROOS, reproduced below, and as disclosed at column 2, lines 15-21, hollow bush d is provided with a circumferential groove d¹ that is adapted to be engaged by spring-loaded headed pin a² disposed in the housing secured to case a.



At least groove d^1 makes bush d non-continuous. ROOS does not disclose a longitudinal continuous hollow element forming a reservoir.

Moreover, as seen in Figure 2 of ROOS, and as disclosed on column 2, line 22, the plunger e has a concave press-face e^1 .

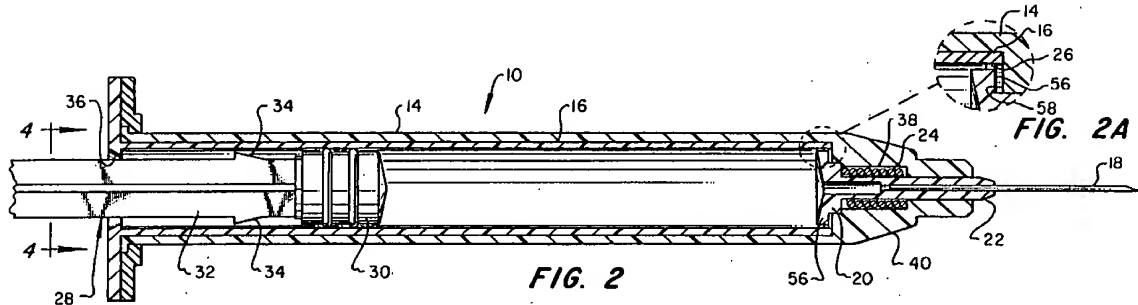
As ROOS neither discloses a longitudinal continuous hollow element forming a reservoir nor a piston having a convex tip, ROOS does not anticipate claim 45.

Independent claim 89 is amended and recites a hollow reservoir having a longitudinal continuous external surface. Claim 89 also recites that a piston has a convex tip. The analysis above regarding claim 45 is equally applicable to claim 89. The dependent claims are believed patentable at least for depending from an allowable independent claim.

Claims 45-47, 49-52, and 87-89 were rejected as anticipated by DeCHELLIS et al. 4,921,486. That rejection is respectfully traversed.

Independent claim 45 is amended and recites that a base of a needle directly contacts an end face of a hollow element. Independent claim 89 recites that the needle is fixedly engaged directly between an end face of the reservoir and the housing.

As seen in Figures 2 and 2a of DeCHELLIS, reproduced below, a plurality of frangible links 26 keep the needle 18 in place against the side of the reservoir body 16. That is, links 26 radially connect the needle 18 to a wall of the reservoir body.



In order for DeCHELLIS to operate in the manner intended, the needle of DeCHELLIS could neither be in direct contact with an end face of the hollow element as recited in claim 45, nor could the needle be fixedly engaged between an end face of the reservoir and the housing, as recited in claim 89.

As this reference does not disclose that which is recited, the anticipation rejection is not viable. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 53-55 and 57 were rejected as unpatentable over YAMASHITA in view of HIGASHIKAWA 5,704,918. That rejection is respectfully traversed.

HIGASHIKAWA is only cited for the disclosure of an outer casing and two inner tubes that form a reservoir. HIGASHIKAWA does not disclose what is recited in claim 45. As set forth above, YAMASHITA does not disclose what is in claim 45. Since claims 53-55 and 57 depend from claim 45 and further define the invention, the proposed combination of references would not have been sufficient to render obvious claims 53-55 and 57.

New claim 90 depends from claim 45 and is believed patentable at least for depending from an allowable independent claim. Support for claim 90 can be found at least on page 17, lines 14-18.

Since the withdrawn claims depend from claim 45 and thus include all the limitations of claim 45, and since claim 45 is believed allowable, the withdrawn claims should be examined and allowed as part of the present application.

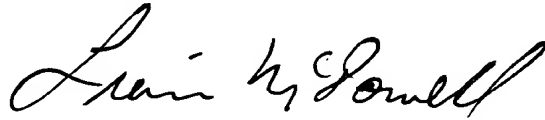
In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance of all claims pending in the application are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

A handwritten signature in cursive script, reading "Liam McDowell".

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